NRC INSPECTION MANUAL

PART 9900: TECHNICAL GUIDANCE

STS4791V.TG

STANDARD TECHNICAL SPECIFICATIONS
SECTION 4.7.9.1.a
ESTABLISHMENT OF VISUAL INSPECTION INTERVALS FOR SNUBBERS

A. PURPOSE

To provide the NRC position on utilizing functional testing results as a basis for establishing visual inspection intervals

B. REQUIREMENT

The Technical Specifications (STS 4.7.9.1.a.) requires a visual inspection of hydraulic snubbers at certain intervals. The interval between the visual inspections is dependent upon the findings from the previous inspection. The more snubbers found inoperable, the shorter is the required interval between inspections.

C. DISCUSSION

An inoperable snubber is one that would not fulfill its functional requirements when called upon to do so. For example, if during visual inspection it was found that the hydraulic reservoir was empty or a linkage connection to the anchor was missing, the snubber would clearly be inoperable. On the other hand, if the fluid in the reservoir was below the "low" mark or the piston was corroded, the licensee could demonstrate operability by performing a functional test (demonstrate correct piston movement, lock up and bleed). If operability is demonstrated, for purposes of determining the visual inspection interval, the snubber shall be considered operable.

NRR has concluded that satisfactory results of functional testing can be used to exempt a snubber from being counted as inoperable for the purpose of establishing the next visual inspection interval provided that the cause of the visual inspection failure is clearly established and corrected (hydraulic problems are normally to be corrected by means of a snubber overhaul) for the particular snubber and for all other snubbers that may be generically susceptible. Note: A snubber is considered to be generically susceptible if:

1. It is the same make or model and has the same design features directly related to the failure of the visual inspection performed on the inoperable snubber; or,

2. It is similarly located or exposed to the same environmental conditions (e.g., same temperature and radiation fields) as the inoperable snubber.

If the cause for failure of the visual inspection is not identified, the snubber shall be considered inoperable for the purposes of establishing the subsequent visual inspection interval.

The foregoing position provides the licensee with increased operational flexibility, and could result in reduced exposure to plant workers. The licensee has the choice of determining the subsequent visual inspection interval based solely on the number of snubbers that fail the visual inspection (does not necessarily mean the snubber will not function) or the licensee may demonstrate that the snubber that failed the visual inspection is in fact operable. If functional testing is used to demonstrate operability, the cause of the visual inspection failure must be identified and corrected for that snubber and all generically susceptible snubbers.

The first option requires more frequent plant shutdowns whereas the second option requires a longer shutdown period. Since both options provide the same level of operability assurance, the choice becomes one of economics on the part of the licensee.

D. REFERENCES

Memorandum from J. H. Sniezek to B. K. Grimes and J. P. Knight dated 4/10/78.

Memorandum from B. K. Grimes and J. P. Knight to J. H. Sniezek dated 5/17/78.

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